

COMPACT VISUAL SUMMARIES USING
SUPERHISTOGRAMS AND FRAME SIGNATURES

ABSTRACT OF THE DISCLOSURE

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FOR SEQUENCE

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For use in a system capable of creating visual summaries of video material, there is disclosed an improved apparatus and method for creating a compact visual summary of video material. In one advantageous embodiment, the apparatus of the present invention comprises a visual summary controller that is capable of receiving keyframes of video material, and capable of extracting frame signatures from the keyframes, and capable of using the frame signatures to create superhistograms from the keyframes, and capable of using the frame signatures and the superhistograms to create a compact visual summary of the video material. The visual summary controller uses the superhistograms to filter and cluster the keyframes, and adds representative keyframes from the clustered keyframes to the compact visual summary. A visual summary retrieval module retrieves and displays a compact visual summary in response to a user request.